

09-07-04

IPW



Express Mail No. EV449562872US  
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Jeffery R. Raymond et al.  
Application No. : 10/624,946  
Confirmation No. : 7685  
Filed : July 21, 2003  
For : 3-NITROGEN-6,7-DIOXYGEN STEROIDS AND USES RELATED  
THERE TO

Art Unit : 1614  
Docket No. : 480117.407C1  
Date : September 2, 2004

Mail Stop PG PUB  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

REQUEST FOR CORRECTED APPLICATION PUBLICATION

Commissioner for Patents:

In response to the Notice of Publication of Application, dated July 15, 2004, Applicants respectfully request correction and republication of the above-identified application which they believe to contain material errors.

In particular, lines 1-2 of Claim 38 in the published patent application **incorrectly** read as follows:

**38. A compound of claim 1 wherein  $-N(R^1)(R^2)$  is in a salt form and the salt is a halogen or acetate salt.**

These lines should **correctly** read as follows:

**38. A compound of claim 1 wherein  $-N(R^1)(R^2)$  is in a salt form and the salt is a halogen or acetate salt.**

To assist the Office in identifying the error, enclosed is a copy of page 52 of the published patent application, with a red circle around the language in the claim that was incorrectly printed. A copy of the corresponding page of the patent application (Page 124) as originally filed is likewise attached, with a red circle around the correct language in the claim.

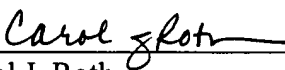
**This error is material in that it affects the scope of Claim 38.**

Applicants respectfully request that the above-noted material error be corrected and that the application be republished by the Office. As the error was made on the part of the USPTO, no fee should be due.

The Office is requested to contact the undersigned at (206) 622-4900 should any additional issue require attention prior to a final decision being made by the Office.

Respectfully submitted,

Seed Intellectual Property Law Group PLLC

  
\_\_\_\_\_  
Carol J. Roth

Registration No. 32,783

CJR:cw

Enclosures:

Transmittal Form  
Page 124 of the Application as filed  
Page 52 of the Published Application

701 Fifth Avenue, Suite 6300  
Seattle, Washington 98104-7092  
Phone: (206) 622-4900  
Fax: (206) 682-6031

510285



Express Mail No. EV449562872US

PTO/SB/21 (08-00)

Please type a plus sign (+) inside this box → ☒

Approved for use through 10/31/2002. OMB 0651-0031

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

**TRANSMITTAL  
FORM**(To be used for all correspondence  
after initial filing)

Application Number	10/624,946
Filing Date	July 21, 2003
First Named Inventor	Jeffery R. Raymond
Group Art Unit	1614
Examiner Name	
Attorney Docket No.	480117.407C1

**ENCLOSURES (check all that apply)**

<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Response <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement; Form PTO-1449 <input type="checkbox"/> Cited References <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts under 37 C.F.R. 1.52 or 1.53 <input type="checkbox"/> Response to Missing Parts/Incomplete Application	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Request for Corrected Filing Receipt <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation, Change of Correspondence Address <input type="checkbox"/> Declaration <input type="checkbox"/> Statement under 37 CFR 3.73(b) <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund	<input type="checkbox"/> CD(s), Number of CD(s) _____ <input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group ( <i>Appeal Notice, Brief, Reply Brief</i> ) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Return Receipt Postcard <input checked="" type="checkbox"/> Additional Enclosure(s) ( <i>please identify below</i> ): <u>Request for Corrected Application Publication;</u> <u>Copy of Page 52 of the Application as filed;</u> <u>Copy of Page 124 of the Published Application</u>
---	---	--

Remarks

**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT**

Individual Name	Carol J. Roth Registration No. 50,922	Customer Number <b>00500</b>
Signature	<i>Carol J. Roth</i>	
Date	September 2, 2004	

**CERTIFICATE OF TRANSMISSION/MAILING**

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

Typed or printed name	~~ Sent via Express Mail ~~	
Signature		Date:

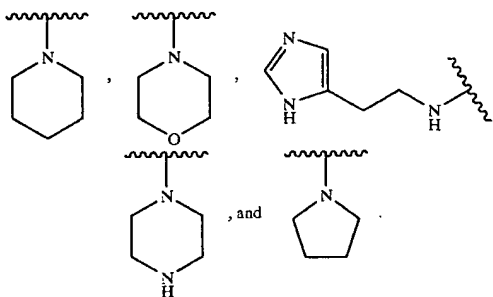
19. A compound of claim 1 wherein 17 is substituted with  $-\text{OR}^6$  or  $=\text{O}$ , wherein  $\text{R}^6$  is hydrogen.

20. A compound of claim 1 wherein  $\text{R}^1$  is selected from  $-\text{C}(=\text{O})-\text{R}^7$ ,  $-\text{C}(=\text{O})\text{NH}-\text{R}^7$ ,  $-\text{SO}_2-\text{R}^7$ ; wherein  $\text{R}^7$  is selected from alkyl, heteroalkyl, aryl and heteroaryl.

21. A compound of claim 20 wherein  $\text{R}^7$  is selected from  $\text{C}_{1-10}$ hydrocarbyl.

22. A compound of claim 20 wherein  $\text{R}^7$  comprises biotin.

23. A compound of claim 1 wherein  $(\text{R}^1)(\text{R}^2)\text{N}-$  is selected from



24. A compound of claim 1 wherein  $\text{R}^1$  is hydrogen and  $\text{R}^2$  comprises a carbocycle.

25. A compound of claim 24 wherein the carbocycle is phenyl.

26. A compound of claim 25 wherein  $\text{R}^2$  is selected from 3-methylphenyl; 4-hydroxyphenyl; and 4-sulfonamidophenyl.

27. A compound of claim 1 wherein  $\text{R}^1$  is hydrogen and  $\text{R}^2$  comprises a  $\text{C}_{1-10}$ hydrocarbyl.

28. A compound of claim 1 wherein  $\text{R}^1$  is hydrogen and  $\text{R}^2$  is heteroalkyl.

29. A compound of claim 28 wherein  $\text{R}^2$  is selected from  $\text{C}_{1-10}$ alkyl- $\text{W}-\text{C}_{1-10}$ alkylene- wherein  $\text{W}$  is selected from  $\text{O}$  and  $\text{NH}$ ;  $\text{HO}-\text{C}_{1-10}$ alkylene-; and  $\text{HO}-\text{C}_{1-10}$ alkylene- $\text{W}-\text{C}_{1-10}$ alkylene- where  $\text{W}$  is selected from  $\text{O}$  and  $\text{NH}$ .

30. A compound of claim 1 wherein  $\text{R}^1$  is hydrogen and  $\text{R}^2$  is  $-\text{CH}_2-\text{R}^7$  wherein  $\text{R}^7$  is selected from alkyl, heteroalkyl, aryl and heteroaryl.

31. A compound of claim 30 wherein  $\text{R}^7$  is selected from alkyl-substituted phenyl; halogen-substituted phenyl; alkoxy-substituted phenyl; aryloxy-substituted phenyl; and nitro-substituted phenyl.

32. A compound of claim 1 wherein each of  $\text{R}^1$  and  $\text{R}^2$  is hydrogen.

33. A compound of claims 1 or 32 wherein each of  $\text{R}^3$  and  $\text{R}^4$  is hydrogen.

34. A compound of claims 32 or 33 where the carbon at numeral 17 is substituted with

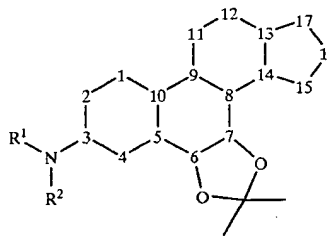
(a) one of the following:  $\text{C}(\text{R}^{5a})(\text{R}^{5a})$ ,  $=\text{C}=\text{C}(\text{R}^{5a})(\text{R}^{5a})$ , and  $-\text{C}(\text{R}^{5a})(\text{R}^{5a})(\text{C}(\text{R}^{5a})(\text{R}^{5a}))_n-$  wherein  $n$  ranges from 1 to about 6; or

(b) two of the following, which are independently selected:  $-\text{X}$ ,  $-\text{N}(\text{R}^1)(\text{R}^2)$ , and  $-\text{R}^{5a}$ ;

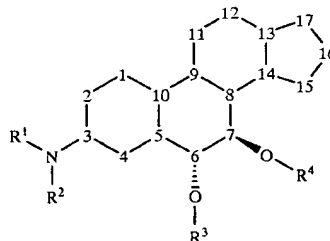
where  $\text{R}^{5a}$  at each occurrence is independently selected from  $\text{H}$ ,  $\text{X}$ , and  $\text{C}_{1-30}$  organic moiety that may optionally contain at least one heteroatom selected from the group consisting of boron, halogen, nitrogen, silicon

and sulfur; where two geminal  $\text{R}^5$  groups may together form a ring with the carbon atom to which they are both bonded.

35. A compound of claim 1 wherein  $\text{R}^3$  and  $\text{R}^4$  together form a ketal of the structure



36. A compound of claim 1 wherein  $-\text{OR}^3$  and  $-\text{OR}^4$  have the stereochemistry shown



37. A compound of claim 1 wherein  $-\text{N}(\text{R}^1)(\text{R}^2)$  is in a salt form.

38. A compound of claim 1 wherein  $-\text{N}(\text{R}^1)(\text{R}^2)$  is in a salt form and the salt is a halogen or acetate salt.

39. A compound of claim 1 which is a prodrug of the formula shown in claim 1.

40. A compound of claim 1 and pharmaceutically acceptable salts, solvates, stereoisomers but not prodrugs thereof, in isolation or in mixture.

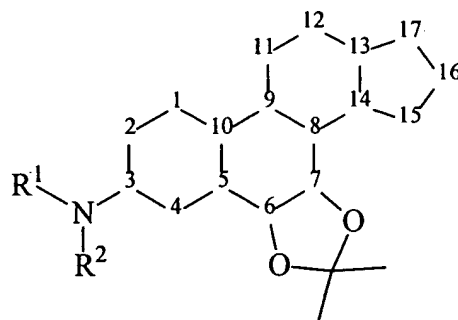
41. A compound of claim 1 wherein at least one of the carbons at numerals 10 and 13 are substituted with methyl.

42. A compound of claim 1 wherein each of  $\text{R}^1$  and  $\text{R}^2$  are independently selected from hydrogen and organic groups having 1-20 carbons and optionally containing 1-5 heteroatoms selected from nitrogen, oxygen, silicon, and sulfur.

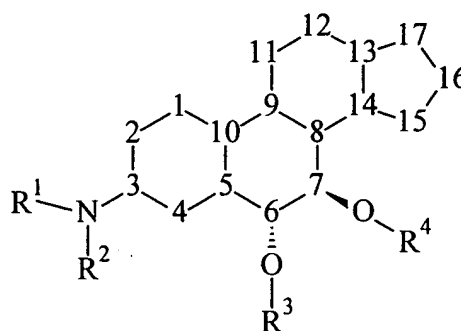
43. A compound of claim 1 wherein

$\text{R}^1$  and  $\text{R}^2$  are independently selected from hydrogen,  $\text{R}^8$ ,  $\text{R}^9$ ,  $\text{R}^{10}$ ,  $\text{R}^{11}$  and  $\text{R}^{12}$  where  $\text{R}^8$  is selected from alkyl, heteroalkyl, aryl and heteroaryl;  $\text{R}^9$  is selected from  $(\text{R}^8)_r$ -alkylene,  $(\text{R}^8)_r$ -heteroalkylene,  $(\text{R}^8)_r$ -arylene and  $(\text{R}^8)_r$ -heteroarylene;  $\text{R}^{10}$  is selected from  $(\text{R}^9)_r$ -alkylene,  $(\text{R}^9)_r$ -heteroalkylene,  $(\text{R}^9)_r$ -arylene, and  $(\text{R}^9)_r$ -heteroarylene;  $\text{R}^{11}$  is selected from  $(\text{R}^{10})_r$ -alkylene,  $(\text{R}^{10})_r$ -heteroalkylene,  $(\text{R}^{10})_r$ -arylene, and  $(\text{R}^{10})_r$ -heteroarylene;  $\text{R}^{12}$  is selected from  $(\text{R}^{11})_r$ -alkylene,  $(\text{R}^{11})_r$ -heteroalkylene,  $(\text{R}^{11})_r$ -arylene, and  $(\text{R}^{11})_r$ -heteroarylene, and  $r$  is selected from 0, 1, 2, 3, 4 and 5, with the proviso that  $\text{R}^1$  and  $\text{R}^2$  may join to a common atom so as to form a ring with the common atom.

35. A compound of claim 1 wherein  $R^3$  and  $R^4$  together form a ketal of the structure



36. A compound of claim 1 wherein  $-OR^3$  and  $-OR^4$  have the stereochemistry shown



37. A compound of claim 1 wherein  $-N(R^1)(R^2)$  is in a salt form.

38. A compound of claim 1 wherein  $-N(R^1)(R^2)$  is in a salt form and the salt is a halogen or acetate salt.

39. A compound of claim 1 which is a prodrug of the formula shown in claim 1.

40. A compound of claim 1 and pharmaceutically acceptable salts, solvates, stereoisomers but not prodrugs thereof, in isolation or in mixture.